Visualize the EEG output from the PREP processing pipeline.

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Calling directly: prepReport

This helper reporting script expects that EEGReporting will be in the base workspace with an EEGReporting.etc.noiseDetection structure containing the report. It also expects the following variables in the base workspace:

- summaryFile - variable containing the open file descriptor for summary
- consoleID - variable with open file descriptor for console (usually 1 unless the output is redirected).
- relativeReportLocation report location relative to summary

The reporting function appends a summary to the summary report.

Usually the prepReport script is called through the function:

```
publishPrepReport
```

It is not a function itself, to allow the MATLAB publish to dump a nice output.

Write data status and report header

```
EEGParticipant_C07_Trial_1.set
Channels: 31
Frames: 66000
Error status: unprocessed
Boundary errors: [ ]
Detrend errors: [ ]
Line noise errors: [ ]
Reference errors: [ ]
Prep version: PrepPipeline0.55.3
Data summary: sampling rate 1000Hz
Events: 22
Original events: 22
Channels interpolated during reference:
  [ ]
Channels still noisy after reference:
  [ ]
Channels removed during post-process:
  [ ]
```

Line noise removal step

```
Line noise method: clean

Struct contents reference from a non-struct array object.

Error in reportLineNoise (line 22)
    fprintf(fid, 'Sampling frequency Fs: %g Hz\n', lineNoise.Fs);

Error in prepReport (line 117)
summary = reportLineNoise(consoleFID, noiseDetection, numbersPerRow,
 indent);
```

Initial detrend for reference calculation
Spectrum after line noise and detrend
Referencing step
Robust channel deviation (referenced)
Robust channel deviation (original)
Robust channel deviation (interpolated)
Robust deviation window statistics
Median max abs correlation (referenced)
Median max abs correlation (original)
Median max abs correlation (interpolated)
Mean max abs correlation (referenced)
Mean max abs correlation (original)
Mean max abs correlation (interpolated)
Bad min max correlation fraction (referenced)
Bad min max correlation fraction(original)
Bad min max correlation fraction (interpolated)
Correlation window statistics
Bad ransac fraction (referenced)
Bad ransac fraction (original)
Bad ransac fraction (interpolated)
Channels with poor ransac correlations
HF noise Z-score (referenced)
HF noise Z-score (original)
HF noise Z-score (interpolated)
HF noise window stats
Noisy average vs robust average reference
Noisy and robust average reference by time
Noisy vs robust average reference (filtered)
Noisy minus robust average reference by time

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